

CLAIMS:

1. A sound reproduction system comprising:
 - an audio processor with a filter arranged for applying a first head related transfer function over a predetermined first frequency range to an input audio signal from an audio signal source, and yielding an output audio signal for a sound production means; and
 - 5 - a first data source, which is arranged for delivering first filter coefficients of the first head related transfer function to the filter,
 - characterized in that
 - a second data source is comprised, which is arranged for delivering second filter coefficients of a second head related transfer function over a predetermined second
 - 10 frequency range, unequal to the first frequency range, to the filter for filtering the input audio signal yielding the output audio signal.
2. A sound reproduction system as claimed in claim 1, characterized in that
 - a microphone is included for performing a sound measurement; and
 - 15 - the first data source comprises coefficient calculation means for calculating the first filter coefficients from the sound measurement; and
 - the second data source comprises a memory for storing data related to the second head related transfer function filter.
- 20 3. A sound reproduction system as claimed in claim 2, characterized in that
 - the second data source comprises calculating means for calculating the second filter coefficients based on data from the memory.
- 25 4. A computer program for execution by a processor, describing a method of sound reproduction comprising the steps:
 - obtaining coefficients of a first head related transfer function from a first data source;
 - applying a first head related transfer function filtering to an input audio signal from an audio signal source, yielding an output audio signal,

characterized in that the computer program comprises further steps in its method of:

- obtaining coefficients of a second head related transfer function from a second data source; and

5 - applying a second head related transfer function filtering to an input audio signal from an audio signal source, yielding an output audio signal.

5. A data carrier storing a computer program for execution by a processor, describing a method of sound reproduction comprising the steps:

10 - obtaining coefficients of a first head related transfer function from a first data source;

- applying a first head related transfer function filtering to an input audio signal from an audio signal source, yielding an output audio signal,

characterized in that the data carrier stores further steps of the method:

15 - obtaining coefficients of a second head related transfer function from a second data source; and

- applying a second head related transfer function filtering to an input audio signal from an audio signal source, yielding an output audio signal.

20 6. A data carrier storing a first head related transfer function over a first predetermined frequency range, characterized in that

- also a second head related transfer function over a second predetermined frequency range is stored, and

- the second head related transfer function comprises complementary
25 information, improving the simulation of sound from a loudspeaker by means of sound production means.

7. Signal transmission system transmitting a first head related transfer function over a first predetermined frequency range, characterized in that

30 - also a second head related transfer function over a second predetermined frequency range is transmitted, and

- the second head related transfer function comprises complementary information, improving the simulation of sound from a loudspeaker by means of sound production means.